BUS 201-001-031
Innovation Creativity Entrepreneurship and Design (ICED)
COURSE OUTLINE – Fall 2018

Th 14:00-17:00
ED 621

Instructor: Dr. Peter W. Moroz
Office: ED 524.8
Phone: 1-306-270-1996
Office hours: by appointment
Course web: UR Courses at http://www.uregina.ca/urcourses/
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COURSE DESCRIPTION AND OBJECTIVES

This course explores ideation and opportunity discovery as significant to the processes of innovation, creativity, entrepreneurial thinking and design. The course is applicable to a wide range of disciplinary and professional areas. Students will be introduced to theoretically derived and practically driven concepts, tools and models as a means for identifying, building and utilizing the skills and competencies that will help them manage the ideation process relevant. This process may extend to projects, problems, challenges and opportunities, both economic and non-economic in nature. The objective of the course is to understand and gain experience in utilizing these tools through experiential exercises and assignments designed to help students discover/identify/create opportunities in all facets of their lives. A variety of texts, cases, in class discussions, challenges, and multi-media presentations will be utilized in the delivery of the course. Students will also be prompted to engage in experiential learning exercises and simulations. The course is centered upon two major projects: one to be done individually and one that is team based.

On completion of this course, students will be able to:

1) Understand the nature and process of ideation and opportunity discovery
2) Determine the role of ideation related to the processes of problem solving, discovering/creating new opportunities, design and innovation
3) Employ and evaluate the utility of a wide variety of ideation and creative models and structures within different contexts and processes
4) Identify the importance of concepts, tools and models related to team building and performance when engaging in creative and/or innovative activities
5) Explore, strategize and implement ideation and creativity models by engaging in the processes related to developing new products/services/programs/opportunities

COURSE METHODOLOGY

THIS IS NOT A LECTURE COURSE BUT AN INTERACTIVE/EXPERIENTIAL COURSE. Reading the pre-assigned cases and materials is necessary for successful participation.

This course is structured around using ideation and opportunity discovery techniques to understand and enhance creativity, entrepreneurship, design and innovation processes. Interactive classroom sessions will be used to explore the concepts, methodologies and tools associated with this objective. Case studies, readings and other course materials will be provided before classes and closely aligned with classroom learning exercises. Participation in these activities is extremely important to the learning process. Ultimately, these experiential exercises will help students integrate and adapt models and tools to various assignments. Class projects and assignments will be staged with learning materials as much as possible so as to keep students structured while working on the class deliverables across the semester. Two of the three main projects are structured this way. The first is individual and takes place in the first half of the semester. It involves identifying a problem and using course materials to render an innovative solution. The second is team based and falls in the second half of the semester. It involves identifying a problem/need/opportunity and designing a solution/product that uses models, tools and concepts discussed in the course to evaluate the process undertaken. Students will be evaluated on their engagement, usage of course materials, critical analysis skills and understanding of the processes, not the end results of the processes themselves. Failure to produce a ‘successful’ outcome is not a requirement for a good grade: only that students undertake and understand the process.

COURSE MATERIALS AND READINGS:

Assigned readings from the following publications (the instructor will provide these readings):

- Richard Morris, *The Fundamentals of Product Design*, Ava Publishers (I own this book and it is to be loaned out and read/reviewed by each student across the semester)
- Vijay Kumar, *101 Design Methods: A structured approach for driving innovation in your organization*, Wiley Publishers
Assigned Cases:
- A Tale of Two Cases, Weisberg.
- How Pixar Fosters Collective Creativity, Ivey Publishing
- Nanyang Optical: Beyond Product Design: From Idea to Launch, Ivey Publishing
- Other selected readings as posted on URCourses

Assigned interactive assignments:
- Kitty Hawk simulation challenge (Litz)
- Moe’s in class prototyping exercise (Kaufmann)
- IP and water transport design challenge (Moroz)
- Various other minor interactive challenges

Recommended Reading:

COURSE EVALUATION

Quizzes/challenges/competitions/reports (ongoing) 30 marks
Reading, learning and teaching presentation – Team (presented on October 25) 15 marks
Problem analysis – Individual (hand in due Nov 8th) 20 marks
Design project – Team (Dec 6, last class: hand in and project presentation) 30 marks
Design project team assessment – Individual (last day of class, Dec 6) 5 marks

TOTAL 100 marks

ONCE AGAIN: THIS IS NOT A LECTURE CLASS BUT AN INTERACTIVE / EXPERIENTIAL CLASS. It is expected that you will treat your participation in this course in a professional manner. Read the materials provided for each class carefully. By doing this, you will be well-prepared for the discussions, case analyses, assignments, and simulations used to apply key concepts, models and processes relevant to ICED.

QUIZZES/CHALLENGES/COMPETITIONS/REPORTS
Over the course of the semester, the instructor will provide a series of experiential and interactive assignments/quizzes that will count toward your final grade. Students will be provided with the
materials and readings in advance as well as the expectations and grading regimes used for each activity/assignment. Quizzes will be random. If students do not show up for class they will not have an opportunity to be graded and other students may be disadvantaged.

Examples of off possible activities that will be graded:
- Problem solving challenges
- Puzzle busters
- Cartoon caption challenges
- Open media journal reports (does not have to be written but presented in any creative way that effectively gets across material or information that needs to be communicated/evaluated)
- Quizzes
- Improv challenges
- Case study competitions
- Problem solving process evaluations

Grades will be assigned on the nature and rigor of the activities/assignments, with no activity being awarded less than 2 marks and no more than 5 marks.

READING, LEARNING, AND TEACHING PRESENTATION (TEAM)
A list of books is provided in the course outline, but students are also encouraged to seek out podcasts, documentaries and other sources of materials (for example: Malcolm Gladwell podcasts) to present on (as approved by the instructor). One of these books (or any other sources of information/learning approved by the instructor) must be read/viewed/digested by the entire group. Students will have one week to select a group of no more than 4 individuals and the book (source material) they wish to read and present on. If there are multiple teams who wish to present the same book/source, a challenge process will be used to determine who gets what book/source. Therefore have a list of at least 5 sources.

THIS IS NOT A BOOK REPORT. I AM NOT LOOKING FOR FACTS, WHAT HAPPENED OR HOW THE BOOK ENDS.
The presentation provided will be of original content produced by the students with the objective of:

1. Identify any ideas, models, concepts or processes that could be used by the team for some specific purpose
2. Explain the above to the class in a way that can be easily understood and utilized with some leadership in determining where this learning material might be potentially useful, and in what contexts
3. Put the source material into a process/context through a simulation or hypothetical/real problem/opportunity which your team identifies (it can involve other class students)
4. Evaluate the utility of the source material as you have used it in your example: did it have utility? Was it easy to use? Did it enhance outcomes/performance? What are the implications for its usage? Etc.
This is a flipped classroom exercise that requires teams to be the instructor and present material in a way that is innovative, effective and impactful for the rest of the class. The instructor has read a majority of these books, but not all, so learning extends to that of the instructor. Different perspectives, experiences and talents are welcome to be utilized in how the material is presented (yes, videos, interactive power points, and stock presentations are allowed, but the instructor does not wish to impose any world views or formats - any medium for presentation may be utilized (as discussed with the instructor). The presentation can take no more than 15 minutes.

PROBLEM ANALYSIS PROJECT (INDIVIDUAL)
Students will be tasked with solving a problem using any of the creative processes discussed in class (or others that they have identified for themselves as per approval of instructor). Students will be required to record the processes they have used that include a report on what they did, how they did it, why they did it, what the outcome was and what they would want to change if they did it again. This is a creative assignment, so there is no set structure as to what you are to submit to the instructor: It may be a written report, videos, a blog web link, artistic representations etc. – the sky is the limit. However, the assignment should follow or utilize at least one of the creative processes presented in the course.

Objective: identify and find a solution for anything related to the sentence “problems encountered when a person is inside/on/using a moving vehicle of any kind”.

READING, LEARNING, AND TEACHING PRESENTATION (TEAM)
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THIS IS NOT A BOOK REPORT. I AM NOT LOOKING FOR FACTS, WHAT HAPPENED, OR INTERESTING STORIES.
The presentation provided will be of original content produced by the students with the objective of:

1. Identify any ideas, models, concepts or processes that could be used by the team for some specific purpose
2. Explain the above to the class in a way that can be easily understood and utilized with some leadership in determining where this learning material might be potentially useful, and in what contexts
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_Blink_, by Malcom Gladwell
_Applied Imagination_ by Alex Osborn
_How Google Works_, by Eric Schmidt, Jonathon, Rosenberg and Alan Eagle
_The Second Machine Age_ by Erik Brynjolfsson and Andrew Mcafee
_The New Digital Age_ – by Eric Schmidt, Jared Cohen
_The Seven Habits of Highly Effective People_, by Stephen R. Covey
_Ten Faces of Innovation_, by Tom Kelley
_Makers: The New Industrial Revolution_ by Chris Anderson
_The Third Wave, An Entrepreneur’s Vision of the Future_, by Steve Case
_The Art of Innovation_, by Tom Kelley and the Deep Dive story
_Five Dysfunctions of a Team_, by Patrick M. Lencioni
_The Five Temptations of a CEO: A Leadership Fable_, by Patrick M. Lencioni
_Multiple Intelligences: The Theory in Practice_, by Howard E. Gardner
_How to think like Leonardo De Vinci_, by Michael Gelb.
_Total Creativity_, by David Tanner
_Freakonomics_, by Levitt, et al.
_Think Like a Freak_, by Levitt and Dubner
_How to Create a Mind_, by Ray Kurzweil
A Whole New Mind: Why Right-Brainers Will Rule the Future, by Daniel H. Pink


Other books: Creativity in Product Innovation, The 3M way to Innovation, Creative Advertising, Essence of Creativity, Innovation to the Core, Payback, How Would You move Mount Fuji, Leading for Innovation, Drawing on the Right Side of the Brain, Coloring Outside the Lines, Serendipity, Breakthrough Creativity (other books not listed here must be approved by the instructor).

Interesting Media:
Eames the Architect and the Painter
Exit Through The Gift Shop
Beginners Frances Ha
Art & Copy Yves Saint Laurent
Steve Jobs: One Last Thing
TEDTalks – Rebel Design Objectified
Ai Weiwei: Never Sorry
Design Is One: Lella & Massimo Vignelli Pablo

What ones would you like to add?

DESIGN PROJECT (TEAM)

Students will self select into teams of no more than 6 to work towards developing some kind of innovative product, service or program. The exercise is highly unstructured, but has several deliverables (see below a-e). As the objective is to come up with a completely original idea, artistry, or creative outcome that may be argued to have economic or social value, solves a problem/or identifies an opportunity in some way, it is imperative that the team attempt to develop something unique, distinct and that does not appear in social, institutional or market systems (as far as can be detected). THE END RESULT DOES NOT HAVE TO BE SUCCESSFUL OR CREATIVE: IT MAY LEAD TO FAILURE. THE PROJECT WILL BE GRADED ON THE WORK DONE, DILIGENCE USED AND CRITICAL ANALYSIS OF THE PROCESSES UNDERTAKEN WITH RESPECT TO INCORPORATING COURSE CONCEPTS /MODELS INTO THE PROCESS.

As the project is focused on the process and not the end result or outcome, the development of a prototype is not required, but may be done if the team has interest in doing so (this will not affect the overall mark). The report DOES NOT HAVE TO BE A WRITTEN REPORT, but will consist of:

a) A detailed process used for the identification of the problem (use a logbook or journal or any other means to do so as long as it may be effectively communicated to the instructor/class)
b) An evaluation of the team with respect to how they are adequate/inadequate for solving this problem and how the team was/is structured to deal with any issues that surface (use a team ethnographer); materials discussed in class on personality types, leadership styles or cognitive traits should be used to elaborate on this task.

c) An outline of the creative processes used to tackle the problem (use a logbook or journal or any other means to do so as long as it may be effectively communicated to the instructor/class; video and audio recordings of sessions when possible are encouraged).

d) Any and all rationale, hypotheses and testing processes used to evaluate the solution arrived at (use a logbook or journal or any other means to do so as long as it may be effectively communicated to the instructor/class).

e) Any means for relaying the solution to the problem to the class/instructor. It is up to the student team to generate the most effective way to clearly represent the problem and the solution for others to evaluate.

f) A 5 minute presentation on the last day of class that will be evaluated on 1) clarity 2) adequacy of medium choice 3) group coordination/presentation choreography 4) innovativeness in presentation style 5) demonstrates empathy toward main user/funder/customer through value proposition.

Each of the above categories will be graded on a scale of 5 for a total of 30 marks. Teams are encouraged to work with the instructor and experts to gain as much feedback as possible. There will be 1 class periods available for work on this project, with an expectation that each team member will supply at least an equivalent amount of extra time outside of class (as needed) to complete this project.

TEAM EVALUATION
Students will be required to provide a report on individual member performance relevant to your design project team and any other broad issues that are deemed relevant to the team’s performance. The objective is to:

1) To assess how each team member performed in a fair and arbitrary manner
2) To assess the success of the project based on individual team performance, interaction and time committed
3) To identify any problems experienced with individual team members and how these problems were overcome (or if they were not overcome, how they might be overcome conceptually and any tests that might help to validate the solutions posed)
4) A candid evaluation of your own performance/capacity.

Keep in mind, that this assignment should not be shared with any of the other students in the class. Also keep in mind that the instructor will be grading your evaluation by triangulating it with the other team members reviews. In short, half of your team evaluation grading will be based on the evaluation that you do on your team members and half based upon the evaluation your team members have conducted on you. The evaluation is to be professionally done with no overly negative or ad hominem references about team members included in your written report that is submitted directly to your instructor. This is not just a “write what you feel” exercise, but
one that should be supplemented with evidence such as daily notes, emails, log books, personal
reflection processes, interviews with team members, etc. What you wish to do is provide a
convincing source of data and evidence that backs up your assessment and evaluation.

ACADEMIC INTEGRITY:
Organizational members are expected to operate ethically. This ethical standard applies to all
members of the Paul J. Hill School of Business – faculty, staff and students. As a professional
accountant, I am also bound by the Code of Ethical Principles and Rules of Conduct of my
Students enrolled in Business Administration courses at the University of Regina are expected to
adhere rigorously to principles of intellectual integrity. Plagiarism or cheating on examinations and
assignments is a serious offence that may result in a zero grade on an assignment, a failing grade in a
course or expulsion from the University. For more information on this important matter, please
consult the University of Regina Undergraduate Calendar and the handout provided by the Paul J.
Hill School of Business on Academic Misconduct.

NEED FOR ACCOMODATION:
If there is any student in this class who, because of a disability, may have need for accommodations,
please come and discuss this with me, as well as contacting the Coordinator of the Disability
Resource Office at 585-4631.

HARASSMENT:
The University of Regina is committed to creating and maintaining an environment, in which
members of the University community can live, work and learn in a collegial climate of mutual
respect, free of harassment and discrimination. Please refer to Section 8.4.6 of the Undergraduate
Calendar and http://www.uregina.ca/presoff/vpadmin/policymanual/hr/RWLE-Policy-2010.pdf for
additional information.

UNIVERSITY POLICIES AND PROCEDURES:
The University of Regina Undergraduate Calendar 2010-2011 contains important information about
the policies and procedures for courses and examinations. The official version of the Calendar is
available at http://www.uregina.ca/gencal/ugcal/. The policy on course outlines can be found in
Section 5.2.1 of the Undergraduate Calendar.
<table>
<thead>
<tr>
<th>Course # and Date</th>
<th>Class Overview</th>
<th>Preparation for next class</th>
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<tbody>
<tr>
<td>Lecture 1  &lt;br&gt;Sep 6</td>
<td><strong>Introductions:</strong> review of poems.  &lt;br&gt;<strong>Review of course outline:</strong> expectations, deliverables and evaluation.  &lt;br&gt;<strong>Theory of Planned Behaviour vs Theory of Creativity!</strong>  &lt;br&gt;<strong>How the mind works:</strong>  &lt;br&gt;- Type 1 and Type 2 thinking (right and left brain thinking)  &lt;br&gt;- Problem solving and creativity  &lt;br&gt;- Risk, reward and rationality  &lt;br&gt;Tales of creativity!</td>
<td>Ensure that you have read through the course outline and completed the pre course reading assignment for Lecture 2</td>
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<td>Lecture 2  &lt;br&gt;Sep 13</td>
<td><strong>Part 1: THE INTERSECTION OF CREATIVITY AND ORDINARY THINKING</strong>  &lt;br&gt;Tales of creativity!  &lt;br&gt;<strong>Introduction:</strong> Making a case for creativity - creative thinking as a skill and creative thinking as a process. Discussion of the Watson and Crick / Picasso case studies in creativity.  &lt;br&gt;<strong>Pre-course reading:</strong> Weisberg: Two Cases in Creativity – Consult URCourses to download reading assignment and instructions/discussion questions.  &lt;br&gt;<strong>Discussion points for Two Case Studies on Creativity</strong>  &lt;br&gt;<strong>Part 2: Definitions of Creativity, Entrepreneurship, Design and Innovation</strong>  &lt;br&gt;<strong>Basic Philosophies of Creativity</strong>  &lt;br&gt;<strong>Exercise 1:</strong> Exploring existing student creative processes. Students will be asked to provide examples of their creative thinking and breakdown the processes they used in discussion.  &lt;br&gt;The creative personality  &lt;br&gt;<strong>Measuring Creativity</strong>  &lt;br&gt;<strong>Divergent thinking</strong>  &lt;br&gt;<strong>Exercise 2:</strong> Measuring creativity  &lt;br&gt;<strong>Flow flow flow your boat…</strong>  &lt;br&gt;<strong>FLOW – flow take home exercise</strong></td>
<td>Read selected parts of Kahneman and Tversky (URcourses); Mihaly C. Chapter 3; Sawyer Ch 9: Biology and creativity. Read Weisberg Ch 2/ Ch 3 Mihaly, C., Ch 2, 3 and 5 ---------</td>
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### Lecture 3
**Sept 20**

**Part 1: Divergent Thinking**
Exercises in pattern recognition, heuristics and deep thinking:
- picture captioning

**Part 2: Effective Teams**
Individual and team work (Amabile, 1983)
- Engagement and anxiety
- Conflict management – substantive (functional and task related) process based (logistical and procedural) and affective (interpersonal and power related differences) Baer and Kaufman Ch 2

Lecture: Team creativity

Selecting teams for your class group assignment.

Kitty Hawk Preview

Caption contest!

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### Lecture 4
**Sept 27**

Caption contest discussion!

**Part 1: Kitty Hawk Exercise**
You will implement your design.

**Part 2: Kitty Hawk Evaluation**
You will test your design.

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### Lecture 5
**Oct 4**

**Part 1: CREATIVE PROBLEM SOLVING – A BROAD PERSPECTIVE**
CPS (B and C chapter 4)

**Part 2: ZIG ZAG**

Read: Creative Problem Solving (CPS), Baer and Kaufman – URcourses

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### Lecture 6
**Oct 11**

**Part 1: READING, LEARNING, AND TEACHING PRESENTATION**

**Part 2: Geneplore Model**
Associated exercises

Read Ramocki - URcourses

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### Lecture 7
**Oct 18**

**Part 1: MAP model and Mind Mapping,**
Associated exercises
freemind.sourceforge.net
MindMeister
Ithoughts or iMindmap

Read: Lateral thinking techniques, Kaplan – URcourses
<table>
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<tr>
<th>Lecture</th>
<th>Date</th>
<th>Part</th>
<th>Material</th>
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| 8 Oct 25 | Part 2: Daniel Pink Six Senses | All The Rest | Read selected papers
LT models (Alternative Tree, Opposite, Associated Word, Impossible Question, What if? Analogy, SCAMPER (substitute, combine, adapt, magnify, put to other uses, eliminate, rearrange or reverse: p142 Zig Zag) Attribute Listing | URcourses: Raviv,
Associated exercises: create a dinner party (Kelley & Kelley) | Read selected excerpts from Kumar: |
A model of the design innovation process | Selected Cases – Urcourses
Seven modes of the design innovation process | Work on Moe’s exercise
Exercise: Customer Journey Mapping (Kelley and Kelley) | |
| | | Part 2: Moe’s Introductions | |
| | | Moe’s prototyping exercise | |
| Nov 8 | NO CLASS REMEMBERANCE DAY BREAK | | |
| Lect 10 Nov 15 | Part 1: Water Transport Design Challenge 1 | | |
| Lect 11 Nov 22 | Part 2: Water Transport Design Challenge 2 | | |
| Lect 12 Nov 29 | CREATIVITY LAB – FINAL PROJECTS | | |
| Dec 6 | Team Project Presentations | | |